

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

APPLICATION OF KENTUCKY-AMERICAN)	
WATER COMPANY FOR A CERTIFICATE OF)	
PUBLIC CONVENIENCE AND NECESSITY)	
AUTHORIZING THE CONSTRUCTION OF)	CASE NO. 90-338
MODIFICATIONS TO THE KENTUCKY RIVER)	
TREATMENT PLANT INTAKE)	

O R D E R

IT IS ORDERED that Kentucky-American Water Company ("Kentucky-American") shall file an original and 10 copies of the following information with the Commission with a copy to all parties of record within 14 days from the date of this Order. If the information cannot be provided by this date, Kentucky-American should submit a motion for an extension of time stating the reason a delay is necessary and include a date by which it will be furnished. Such motion will be considered by the Commission.

1. The hydraulic analyses of the existing and proposed raw water system depict low pressures at junctions 1, 2, 3, 4, and 5. These junctions appear to represent the wet well from which the raw water pumps obtain water. It appears that the low pressure depicts the water level in the well as compared to the lowest elevation of the wet well. If this is correct, the low pressure would not present any operational problems as long as the water level in the wet well is always above the lowest stage of the vertical turbine pump. Based on the above, provide clarification

concerning this matter. (Note - if the pressure or lack thereof reflects an actual low pressure condition, provide details of any preventive measures or additional construction Kentucky-American intends to perform to protect against this type of occurrence. Details should be documented by hydraulic analyses and field measurements.)

2. The computer hydraulic analyses of the existing and proposed raw water system depict low pressure under certain operating conditions at junction 20 and 25, respectively. According to the schematic this would be located on the suction side of the existing third lift pumping station. The pressure at this junction sometimes falls below 20 psig. Most engineering references including the "Recommended Standards For Water Works" by the Great Lakes Upper Mississippi River Board Of State Public Health and Environmental Managers ("Ten States Standards") recommend that the pressure on the suction side of a pump be at least 20 psig when the pump is operating normally. Based on this, provide details of any preventive measures or additional construction Kentucky-American intends to perform to ensure a minimum of 20 psig exists on the suction side of the third lift pumping station.

3. Provide a narrative description of the proposed daily operational sequences of the raw water system. This description should include how the proposed pumps will function as well as the methods of control utilized to satisfy the changes in need for raw water.

Done at Frankfort, Kentucky, this 3rd day of December, 1990.

PUBLIC SERVICE COMMISSION


For the Commission

ATTEST:


Executive Director